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Filed : November 9, 2001

AMENDMENTS TO THE CLAIMS

Listed below are the changes made to the claims, in which the insertions are underlined and deletions are shown by strikethrough. The listing of claims below replaces all prior versions and listings of claims in the application. The list of claims presents each claim with its respective status shown in parentheses.

1. **(Currently Amended)** A distributed file storage system comprising:
a plurality set of storage modules in communication with each other, said plurality of storage modules including the set including:
 - a first storage module including a processing module;
 - a second storage module including a processing module;
 - a third storage module including a processing module; and
 - a fourth storage module including a processing module;

a file stored on the distributed file storage system;

a ~~first~~ file portion of the file comprising a first set of file data stored in the first storage module;

a second file portion of the file comprising a second set of file data stored in the second storage module, wherein the second set of file data is different from the first set of file data;

a first metadata related to the location of the file stored on the first storage module, the second storage module, the third storage module, and the fourth storage module;

a second metadata related to the location of the file stored on at least one of the first storage module, the second storage module, the third storage module, and the fourth storage module but not on all of said storage modules; and

a switch module in communication with the set of storage modules, the switch module configured to receive a read request for the file stored on the distributed file storage system and to send the read request to any one of the plurality set of storage modules;

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each of the plurality set of storage modules capable of using the first metadata to respond to and implement the read request on behalf of the distributed file storage system; and

an allocator module for distributing the first and second metadata and the file portions across the storage modules in a manner appropriate for the storage system and for each file.

2. **(Previously Presented)** The distributed file storage system of Claim 1, further comprising error correction data related to the file, the error correction data stored in the distributed file storage system.

3. **(Currently Amended)** The distributed file storage system of Claim 2, further comprising wherein the error correction data which includes parity information.

4. **(Currently Amended)** The distributed file storage system of Claim 3, further comprising wherein the parity information which includes parity data blocks and location information indicating where the parity data blocks are stored, wherein such location information may be later used to retrieve the parity blocks, and wherein the second metadata further indicates the location information.

5. **(Currently Amended)** The distributed file storage system of Claim 2, further comprising wherein the error correction data which includes redundancy data related to the file, and wherein the second metadata which further indicates the location of the redundancy data.

6. **(Currently Amended)** The distributed file storage system of Claim 5, further comprising wherein the first metadata related to the location of the file includes metadata related to the root directory.

7. **(Currently Amended)** The distributed file storage system of Claim 1, further comprising wherein each of the storage modules which are configured to receive a request to and initiate the request to move the first file portion in real-time from the first storage module to the third storage module, and to send a request to update the second metadata to indicate the location of the moved first file portion.

8. **(Currently Amended)** The distributed file storage system of Claim 1, further comprising wherein each of the storage modules which are configured to receive a request to and initiate the request to replicate the first file portion in real-time and to store the replicated first

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file portion on the third a different storage module, and to send a request to update the metadata to indicate the location of the replicated first file portion.

9. (Currently Amended) The distributed file storage system of Claim 1, further comprising wherein the second metadata which includes metadata related to the locations in which the file data is stored.

10. (Currently Amended) The distributed file storage system of Claim 1, further comprising wherein the second metadata which includes metadata related to a parent directory of the file.

11. (Previously Presented) The distributed file storage system of Claim 1, further configured to handle more READ requests than WRITE requests.

12. (Previously Presented) The distributed file storage system of Claim 1, further configured to handle block transactions.

13-42. (Canceled)

43. (Previously Presented) The distributed file storage system of Claim 1, wherein the file has been stored on a number of the storage modules of the set of storage modules, wherein the number is determined specifically for the file, and wherein the number is equal to or greater than two.

44-61. (Canceled).

Please add New Claims 62-70:

62. (New) A file based distributed storage system comprising:
several storage modules linked together, each of which is configured to handle
read and write requests on behalf of the entire distributed storage system;
directory metadata configured to be used to identify the location of each file stored
on the storage system, wherein the directory metadata is distributed across at least some
of the several storage modules and more than one storage module must be used in order
to locate a file;
an allocation module configured to allocate the directory metadata across the
storage modules of the storage system as appropriate to optimize the functionality of the
storage system.

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63. (New) The file based distributed storage system of Claim 62, further comprising the directory metadata of the storage system which is arranged in a hierarchical structure.

64. (New) The file based distributed storage system of Claim 63, further comprising directory metadata which includes a first and a second metadata structures in order to locate a file, said first directory metadata structure referencing said second directory metadata structure; and said second directory metadata structure referencing the file;

65. (New) The file based distributed storage system of Claim 64, further comprising file metadata referenced by said second metadata structure and configured to reference data blocks that comprise the desired file.

66. (New) The file based distributed storage system of Claim 65, further comprising the file metadata which is stored on a different storage module than the second directory metadata structure.

67. (New) A file based distributed storage system comprising:
several storage modules linked together, each of which is configured to handle
read and write requests on behalf of the entire distributed storage system;
file metadata configured to be used to identify the location of data blocks
comprising a file stored on the storage system, wherein the data blocks are distributed
across at least some of the several storage modules and more than one storage module
must be used in order to assemble the file;
an allocation module configured to allocate the blocks and the file metadata across
the storage modules of the storage system as appropriate to optimize the functionality of
the storage system.

68. (New) The file based distributed storage system of Claim 66, wherein the file is stored in a hierarchical file system.

69. (New) The file based distributed storage system of Claim 66, further comprising directory metadata configured to reference the file metadata.

70. (New) The file based distributed storage system of Claim 69, wherein the file metadata is stored on a different storage module than at least a portion of the directory metadata that leads to the location of the file.

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SUMMARY OF INTERVIEW

July 19, 2006 Interview

On July 19, 2006, Arthur S. Rose, representative for the Applicants, conducted a telephone interview with the Examiner. Pending Claims 1-12 and 43 and the associated rejections in the Office Action mailed June 14, 2006 in the above-referenced case were discussed. The substance of the interview is reflected in the remarks that follow.

December 7, 2006 Interview

On December 7, 2006, Arthur S. Rose, representative for the Applicants, conducted a telephone interview with the Examiner.

Principal Arguments and Other Matters

Applicants' representative and the Examiner discussed the fact that the Office Action mailed on June 14, 2006 in the above-referenced case was marked as a Final Action. This was the Examiner's first action after the Applicants filed an RCE. The Examiner agreed that this action should have been marked as a non-final office action. The Examiner directed the Applicants' representative to treat the June 14, 2006 Office Action as a non-final office action and to file a response within the usual time for filing a response in a non-final action.

Results of Interview

The Examiner will withdraw the finality of the June 14, 2006 Office Action.